

## A Business Should be as Big as Its Job

If bigness is of benefit to the public it should be commended.

The size of a business depends upon the needs which that business is called upon to serve. A business should be as big as its job. You do not drive tacks with a pile-driver—or piles with a tack-hammer.

Swift & Company's growth has been the natural and inevitable result of national and international needs.

Large-scale production and distribution are necessary to convert the live stock of the West into meat and by-products, and to distribute them over long distances to the consuming centers of the East and abroad.

Only an organization like that of Swift & Company, with its many packing plants, hundreds of distributing houses, and thousands of refrigerator cars, would have been able to handle the varying seasonal supplies of live stock and meet the present war emergency by supplying, without interruption:

**First**—The U. S. soldiers and the Allies in Europe by shipping as much as 800 carloads of meat products in a single week!

**Second**—The cantonments in the United States.

**Third**—The retailers upon whom the American public depends for its daily supply of meat.

But many people ask—Do producers and consumers pay too much for the complex service rendered?

Everyone, we believe, concedes the efficiency of the Swift & Company organization—in performing a big job in a big way at a minimum of expense.

Swift & Company's total profit in 1917 was less than 4 cents on each dollar of sales of meat and by-products. Elimination of this profit would have had practically no effect on live stock and meat prices.

Do you believe that this service can be rendered for less by any other conceivable method of organization or operation?

These questions and others are answered fully and frankly in the Swift & Company 1918 Year Book sent free on request.  
Address Swift & Company, U. S. Yards, Chicago

Swift & Company, U.S.A.

"English as She Is Spoke."  
"This ain't where we want off at."  
It was a well-dressed, attractive-looking young woman, and they were in a street car which was about to come to a stop.  
"This ain't where we want off at,"—Dayton (Ohio) News.

When a woman cuts a man's acquaintance she looks daggers at him.



Canada made me Prosperous

—that's what thousands of farmers say, who have gone from the U. S. to settle on homesteads or buy land in Western Canada. Canada's invitation to every industrious worker to settle in Manitoba, Saskatchewan or Alberta is especially attractive. She wants farmers to make money and happy, prosperous homes for themselves by helping her raise immense wheat crops to feed the world.

**You Can Get a Homestead of 160 Acres Free**

or other lands at very low prices. Where you can buy good farm land at \$15 to \$30 per acre that will raise 20 to 45 bushels of wheat to the acre—it's easy to become prosperous. Canadian farmers also grow wonderful crops of Oats, Barley and Flax. Mixed Farming is fully as profitable an industry as grain raising. The excellent grasses, full of nutrition, are the only food required either for beef or dairy purposes. Good schools and churches; markets convenient; climate excellent. Write for literature and particulars as to reduced railway rates to Supt. of Immigration, Ottawa, Canada, or to

M. V. MacINNIS  
176 Jefferson Ave., Detroit, Mich.  
Canadian Government Agents

### WHICH JOB IS YOURS?

One working hard with hands and feet for low pay or one using your head for a good salary?  
IT IS UP TO YOU.  
The electrical field today demands thousands of skilled workmen at high wages.  
We can teach you at your home during your idle hours.

**THEORY AND PRACTICE OF ELECTRICITY** necessary to fit you for any of these positions. There was never in the history of this country a better opportunity for the live man to make good, but no matter what his natural ability or ambition, the man must be specially trained and instructed. That is up to us.  
**PRACTICAL INSTRUCTION BY A PRACTICAL MAN.** We give our students the personal attention and careful instruction of a Practical Man who knows equally well the intricate details of electricity and the practical side of electrical work that you need to rapidly prepare yourself for well paid and attractive positions.

**NO HIGH SCHOOL EDUCATION NECESSARY.** We understand of the English language and a real desire to learn. Write today for our free book on Electricity that opens the door to Opportunity. DO IT NOW.  
BURGESS ELECTRICAL SCHOOL, YORKE BURGESS, Sept., 742 E. 42nd Street, CHICAGO, ILL.

## REPORT ON DUSTING IS MADE BY M. A. C.

Experiment Station Obtains Variable Results From Use of Powder on Apples.

FIND IT IS TIME-SAVER

Can Be Applied in Less Than One-Half Time Required for Operation of Spraying.

By W. C. DUTTON.  
Experiment Station, Michigan Agricultural College.

East Lansing, Mich.—The use of sulphur and arsenate of lead applied in the form of dust as a substitute for the standard liquid sprays to prevent the most prevalent apple orchard troubles such as scab (Venturia inaequalis), codling moth, bud moth, leaf-roller and others, has been developed to a considerable extent during the last three or four years. Experiments were

Method.	Comparative Cost of Dusting and Spraying.	
	Time per tree, one application.	Total cost per tree.
Spraying	2 1/2 minutes	One application, \$0.09
Dusting (dilute)	53 seconds	Four applications, \$0.36
Dusting (concentrated)	50 seconds	Four applications, \$0.34

accordingly begun by the college, at Morrice, Shiawassee county, in 1915, and in other places in 1916 and 1917 to determine if possible the efficiency of dusts, the best formulae to use and to a limited extent the relative costs of this method under Michigan orchard conditions.

**Materials Used.**  
The sulphur used in this work was very fine, the manufacturers guaranteeing that 95 per cent of it would pass through a 200-mesh screen and some of that used in 1917 was finer still. The arsenate of lead was also exceedingly fine, one manufacturer stating that his product would pass through the finest screen obtainable. In some of the work mixtures were used which contained some inert filler or diluent such as gypsum or hydrated lime.

The dusting has all been done in direct comparison with the standard dilute lime-sulphur and arsenate of lead.

What were the results?  
In 1915 scab was not controlled very successfully by either dusting or spraying. A large percentage of the scabby fruit was caused by late infections. The weather conditions were very favorable for scab development after June 13. If extra applications had been made better control of scab would probably have been secured.

This brings out the occasional need for an extra treatment in seasons of frequent rains. The results at harvest showed the sprayed trees to have 10 per cent less of scabby fruit than the dusted trees. Other factors probably affecting the results in the dusted plot were inexperience with the dusting method, a duster too small for satisfactory work and the application of dust from one side of the trees only.

In 1916, dusting failed almost entirely to control apple scab. The control of scab on the sprayed plot of Starka was very poor. This is possibly explained by the fact that the "pink" application was made before the blossom buds had all separated in the clusters. The control in the other sprayed plots was very much better than in the dusted plots. The periods of infection were all in the early part of the season. In 1915 they were all late in the season.

The dusting method gave very satisfactory results in 1917. The results equaled those secured in the sprayed plots. The season was like that of 1916 in that the infection periods were all early in the summer. The control of scab on the fruit was very satisfactory in most plots. The condition of foliage in the dusted plot at Muir was much better than on the sprayed trees because of the spray injury on the latter. At Belding there was little difference in the condition of the foliage of the two plots. At Morrice the foliage of the dusted trees was free

of this disease, under Michigan conditions, live over winter in soil which has borne a diseased crop. The rotation which is necessary for other reasons will eliminate all danger from this source.  
Sound seed tubers free from rot, wounds, bruises, scab, or other bluish, disinfected in either formaldehyde or corrosive sublimate, will give a crop practically free from black leg. In the season of 1915, observations which were made in the upper peninsula showed that seed tubers carefully sorted and treated gave less than one-tenth of one per cent of black leg. Seed tubers from the same crop, planted without care, gave a field with 75 per cent black leg.  
Black leg plants (including such tubers as are formed) wherever found in the field should be carefully pulled, carried from the field and destroyed. This keeps the diseased tubers out of the seed stock.

### "BLACK LEG" IS MENACE

Causes Much Loss to Potatoes in Michigan—Can Be Controlled.

By DR. G. H. COONS,  
Experiment Station, Michigan Agricultural College.

East Lansing, Mich.—Of potato diseases which attack the Michigan potato crop, none have spread more rapidly in Michigan within the past two or three years perhaps than "black leg," a trouble which is widespread in the upper peninsula and seems to be gaining a foothold also in southern Michigan. Prior to the summer of 1917 it had been reported but from a few localities in the southern peninsula, and then, in most instances, only in potatoes imported from northern localities. In the wholesale shipping of tubers into the state which took place in 1917 to supply seed stock, however, black leg was introduced into a great number of southern Michigan counties, where it has been known to produce losses of from 25 to 75 per cent of the crop in the field and to cause serious rotting of tubers in storage. It is not known whether the germs

from injury but showed some scab, while on the sprayed trees there was no scab but some spray injury.

It is not possible to tell just why the results with dusting were so much more satisfactory in 1917 than in previous years. This success may have been due to one or all of the following factors—more efficient application of dust, finer materials or more timely application with relation to infection periods.

Better results were obtained at Morrice and Muir, where much of the dusting was done when the trees were wet with either rain or dew than at Belding, where the trees were always dry when material was applied. Several growers, however, have secured satisfactory results by dusting when the foliage was dry.

It is very doubtful if the extra application of dust made in July had any beneficial effect as weather conditions were not favorable for scab infection before the August application.

**Comparative Costs.**  
Dust can be applied in less than one-half the time required for the actual operation of spraying, exclusive of time necessary for refilling sprayer tank. The cost of material for dusting has been more than for spraying. A comparison of the time required per tree and total cost of labor and material for one and four applications is shown below:

Time per tree, one application.	Total cost per tree.	
	One application.	Four applications.
Spraying	2 1/2 minutes	\$0.09
Dusting (dilute)	53 seconds	\$0.36
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The difference in the total cost of the two methods for extensive commercial operations would undoubtedly be smaller than is shown here.

### Insect Control.

No data was secured about insect control because there has never been enough insect injury on the untreated trees to give an accurate check as to the efficiency of the dust for this purpose. Experiments in New York have shown that the leaf-roller and codling moth can be controlled there by the dusting method. This work leads us to believe that the dusting method will control the insects in Michigan orchards.

### Conclusions.

This summary is intended simply to show the progress of the experiments that have been conducted for the last three years with the sulphur dusts. No definite conclusions are intended to be drawn at this time from this work as the use of dusting material as a substitute for liquid mixtures is still in the experimental stage. If this method of control continues to develop as rapidly as during the past few years, it will prove of great value to many apple growers, largely because of the ease and rapidity of application.

**Suggestions.**  
For the benefit of fruit growers who may care to use the dusting method at this time, a few suggestions may prove helpful.

A duster of sufficient capacity and power should be used. Efficient work cannot be done with an undersized machine.

Special dusting sulphur should always be used. The ordinary grades of sulphur are not satisfactory.

Home-mixing of materials should not be tried unless a special mixing machine is used.

Applications should be made from two opposite directions and preferably when there is not any wind.

Unlike spraying, dusting can be safely done when the foliage is wet.

More applications of dust than are usually made of the liquid sprays will probably be desirable. However, the number will depend largely upon weather conditions. The applications of dust should, of course, be made before scab infection periods. Cool and rainy weather is favorable to scab development.

The horticultural department also conducted a dusting experiment with peaches in 1917 but no definite conclusions could be drawn from the results of this work as there was so very little injury by insects or diseases in the untreated plots. This work indicated, however, that peaches can be dusted safely and that peach scab and brown rot can be controlled by dusting.

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### Corn and Alfalfa.

Corn and alfalfa form the basis of successful live stock and poultry growing. No other combination of feeds is so economical in the production of beef, pork, butter and eggs.

## POWDER IN SHOES AS WELL AS GUNS

Foot-Ease to Be Added to Equipment of Hospital Corps at Fort Wayne.

Under the above heading the Detroit Free Press, among other things says: "The theory is that soldiers whose feet are in good condition can walk further and faster than soldiers who have corns and bunions incased in rawhide."

The Plattsburg Camp Manual advises men in training to shake Foot-Ease in their shoes each morning.

One war relief committee reports, of all the things sent out in their Comfort Bags or "Kits," Allen's Foot-Ease received the most praise from the soldiers and men of the navy. It is used by American, French and British troops, because it takes the friction from the shoe and freshens the feet. There is no foot-comforter equal to Allen's Foot-Ease, the antiseptic, healing powder to be shaken into the shoes and sprinkled in the foot-bath, the standard remedy for over 25 years for hot, tired, aching, perspiring, smarting, swollen, tender feet, corns, bunions, blisters or callouses.

Why not order a dozen or more 25c boxes to-day from your Druggist or Dept. store to mail to your friends in training camps and in the army and navy.

### STIRRED HIS FIGHTING BLOOD

Irishman More Than Willing to "Do His Bit" in Conflict With the Hated Enemy.

An auctioneer had been selling horses all day and his voice was getting a little husky so that he was economizing as much as possible in the use of words and even syllables.

Early in the day he had shouted the bids, "One hundred dollars, two hundred dollars, three hundred dollars," etc.

Then he restricted himself to calling out, "one hundred, two hundred, three hundred," etc.

When McCarty, attracted through curiosity by the crowd, came up, the auctioneer had further abbreviated his speech, and was crying, "One hun, two hun, can't I get three hun?"

Off went McCarty's coat, and he sang out, excitedly:

"Don't do this all yourself, young fellow. Let me in it. I can take care of a few of 'em."

### \$100 Reward, \$100

Catarh is a local disease greatly influenced by constitutional conditions. It therefore requires constitutional treatment. HALL'S CATARRH MEDICINE is taken internally and acts through the blood on the mucous surfaces of the system. HALL'S CATARRH MEDICINE destroys the foundation of the disease, gives the patient strength by improving the general health and assists nature in doing its work. \$100 for any case of Catarh that HALL'S CATARRH MEDICINE fails to cure. Druggists sell. Testimonials free. F. J. Cheney & Co., Toledo, Ohio.

### From Bad to Worse.

"I had to get rid of that nurse girl."

"Why?"

"She insisted on frightening the children. I warned her when she came that she was not to tell them stories about bogie men, ghosts or any unreal horrible persons."

"Well?"

"She promised not to. But now every night she tells them if they don't go to sleep the Huns will come and get them."

### A Fair Offer.

"The man that marries my daughter wins a prize for himself." "Make the prize \$50,000 and I'll go you."

### Doubtless.

Thief—Gimme that watch!

Victim—I would, old fellow, but I really can't spare the time!

Dr. Pierce's Peppets are best for liver, bowels and stomach. One Little Peppet for a laxative, three for a cathartic. Ad.

Honest labor is the best remedy for bad luck.

### CITY'S GLORY LONG DEPARTED

Ruins Testify to Existence of Once Mighty Metropolis in South-eastern Africa.



In a far-off corner of southeastern Africa are hidden the ruins of a once mighty city, called in present times the Zimbabwe, or buildings of stones. The more fanciful of the scientists declare that the time of Moses may have seen the building of these crumbling walls, but the weight of evidence seems to prove that the city is only about ten centuries old. Whatever the true dates of the city's history, certainly its ruins today are in appearance very old, very moss hung and very picturesque.

There is nothing sad about the slipping away of these relics of the past, so gradually they have sunk into the soil and broken down with the pressure of time and weather. Their day of glory and prosperity was over some centuries ago, and they rest dreamily in the sunshine. Bright flowers deck the walls as of trying to hold the remaining stones together; and tall trees spread their branches wide to temper the heat of the midday sun and shelter the stones from the chill of the evening.

### Insects Follow Balloons.

Lieut. Depret-Bixio of the French aviation service writes that many insects follow captive balloons in their ascent. He has seen flies go as high as 2,970 feet, after which they die. Grasshoppers cling to the basket of the balloon until the air becomes too rarefied for them, when they let go and fall. He says the swallows have a glorious time catching these insects.

**Kill the Flies Now and Prevent Disease.** A DAISY FLY KILLER will do it. Kills thousands. Lasts all season. All dealers, or ask by express, prepaid for \$1. H. SOMERS, 150 De Kalb Ave., Brooklyn, N. Y. Adv.

### Not to Be Outdone.

The Lark—I sing above the guns.  
The Hen—Well, I cackle over a shell.—New York Sun.

## YOU NEED NOT SUFFER WITH BACKACHE AND RHEUMATISM

For centuries GOLD MEDAL Haarlem Oil has been a standard household remedy for kidney, liver, bladder and stomach trouble, and all diseases connected with the urinary organs. The kidneys and bladder are the most important organs of the body. They are the filters, the purifiers of your blood. If the poisons which enter your system through the blood and stomach are not entirely thrown out by the kidneys and bladder you are doomed.

Weakness, sleeplessness, nervousness, despondency, backache, stomach trouble, headache, pain in loins, and lower abdomen, gall-stones, gravel, difficulty when urinating, cloudy and bloody urine, rheumatism, sciatica, lumbago, all warn you to look after your kidneys and bladder.

GOLD MEDAL Haarlem Oil Capsules are what you need. They are not a "patent medicine" nor a "new discovery." For 200 years they have been a standard household remedy. They are the pure, original imported Haarlem Oil your great-grandmother used, and are perfectly harmless. The healing, soothing oil soaks into the cells and lining of the kidneys and through the bladder, driving out the poisonous germs. New life, fresh strength and health will come as you continue this treatment. When completely restored to your usual vigor, continue taking a capsule or two each day. They will keep you in condition and prevent a return of the disease.

Do not delay a minute. Delays are especially dangerous in kidney and bladder trouble. All reliable druggists sell GOLD MEDAL Haarlem Oil Capsules. They will refund the money if not as represented. In three sizes, sealed packages. Ask for the original imported GOLD MEDAL. Accept no substitutes.

## Carter's Little Liver Pills

You Cannot be Constipated and Happy. A Remedy That Makes Life Worth Living.

Small Pill, Small Dose, Small Price. Genuine bears signature. *Wm. Wood*

ABSENCE of Iron in the Blood is the reason for many colorless faces but CARTER'S IRON PILLS will greatly help most pale-faced people

## ATTENTION! Sick Women

To do your duty during these trying times your health should be your first consideration. These two women tell how they found health.

Hellam, Pa.—"I took Lydia E. Pinkham's Vegetable Compound for female troubles and a displacement. I felt all run down and was very weak. I had been treated by a physician without results, so decided to give Lydia E. Pinkham's Vegetable Compound a trial, and felt better right away. I am keeping house since last April and doing all my housework, where before I was unable to do any work. Lydia E. Pinkham's Vegetable Compound is certainly the best medicine a woman can take when in this condition. I give you permission to publish this letter."—Mrs. E. R. CRUMMING, R. No. 3, Hellam, Pa.

Lowell, Mich.—"I suffered from cramps and dragging down pains, was irregular and had female weakness and displacement. I began to take Lydia E. Pinkham's Vegetable Compound which gave me relief at once and restored my health. I should like to recommend Lydia E. Pinkham's remedies to all suffering women who are troubled in a similar way."—Mrs. ELISE HERR, R. No. 6, Box 83, Lowell, Mich.

### Why Not Try

**LYDIA E. PINKHAM'S VEGETABLE COMPOUND**

LYDIA E. PINKHAM MEDICINE CO. LYNN, MASS.

